

Annual Report 2005



Production Sector

Company Information

Company Name: Exxon Mobil Corporation

Gas STAR Contact: Jacqueline Kaiser

Title: Compliance Engineer

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Annual Report Summary

Please mark the Best Management Practices your company implemented and submit a report page for only those practices

- ☐ BMP 1: Identify and replace high-bleed pneumatic devices
- ☐ BMP 2: Install flash tank separators on glycol dehydrators
- ☒ BMP 3: Partner Reported Opportunities (*Please specify*)

Two facility shutdowns and

Period covered by report: From: 1-1-05 To: 12-31-05

Signature: _____ Date: 3-30-06

* In addition to reporting methane emissions reductions, you are welcome to include other information about your company's participation in Natural Gas STAR in the "Additional Program Accomplishments" section of this form. The Natural Gas STAR Program will use any information entered in this section to recognize the efforts and accomplishments of outstanding partners.



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BMP 1: Identify and Replace High-Bleed Pneumatic Devices

Current Year Activities

A. Facility summary:

Number of devices replaced: _____ devices

Percent of system now equipped with
low/no-bleed units: _____ %**B. Cost summary:**Estimated cost per replacement
(including equipment and labor): \$ _____ /replacement**C. Methane emissions reduction:** _____ Mcf*Please identify the basis for the emissions reduction estimate, using the space provided to show any calculations*☐ Standard calculation

Methane emissions reduction
= [Annual emissions from high-bleed devices being replaced (in Mcf/yr)
- Annual emissions for the replacement devices (in Mcf/yr)]
x Number of devices replaced

Please specify your data source:

- ☐ Field measurement
☐ Manufacturer specifications

☐ Calculation using default

Methane emissions reduction
= 124 Mcf/yr x Number of devices replaced

☐ Other (Please specify)**D. Total value of gas saved:** \$ _____

Total value of gas saved
= Methane emissions reduction (in Mcf)
x Gas value (in \$/Mcf) [If not known, use default of \$3.00/Mcf]

**E. How many high-bleed
devices do you plan to
replace next year?** _____ devices

Previous Years' Activities

Use the table below to report any past activities implemented, but not previously reported to the Natural Gas STAR Program

| Year | # Devices Replaced | Total Cost of Replacements (incl. equipment and labor) (\$) | Estimated Reductions (Mcf/yr) | Value of Gas Saved (\$) |
|------|--------------------|----------------------------------------------------------------|----------------------------------|----------------------------|
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BMP 1 Comments: Please use the back of the page for additional space if needed.



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BMP 2: Install Flash Tank Separators on Glycol Dehydrators

Current Year Activities

A. Facility summary:

Number of flash tank separators installed: _____ separators

Percent of dehydrators in system equipped with flash tank separators: _____ %

B. Cost summary:

Estimated cost per flash tank separator installation (including equipment and labor): \$ _____ /installation

C. Methane emissions reduction: _____ Mcf

Please identify the basis for the emissions reduction estimate, using the space provided to show any calculations

☐ Standard calculation

*Methane emissions reduction
per flash tank installation*

*= [TEG circulation rate (in gal/hr)
x Methane entrainment rate (in scf/gal)
x hours of operation (in hrs/yr)
x 0.90] / 1,000*

**If methane entrainment rate
is not known, use a default
value of 3 scf/gal for energy
exchange pumps or 1 scf/gal
for electric pumps*

Please specify your data source:

- ☐ Field measurement
☐ Manufacturer specifications

☐ Calculation using default

*Methane emissions reduction
= [Average gas throughput (in MMcf/yr)
x 170 scf/MMcf x 0.90] / 1,000*

☐ Other (*Please specify*)

D. Total value of gas saved: \$ _____

*Total value of gas saved
= Methane emissions reduction (in Mcf)
x Gas value (in \$/Mcf) [If not known, use default of \$3.00/Mcf]*

**E. How many flash tank separators
do you plan to install next year?** _____ flash tanks

Previous Years' Activities

Use the table below to report any past activities implemented, but not previously reported to the Natural Gas STAR Program

| Year | # Flash Tank Separators Installed | Total Cost of Installation (incl. equipment and labor) (\$) | Estimated Reductions (Mcf/yr) | Value of Gas Saved (\$) |
|------|-----------------------------------|-------------------------------------------------------------|-------------------------------|-------------------------|
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BMP 2 Comments: *Please use the back of the page for additional space if needed.*

[illegible]



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BMP 3 Comments/Additional Benefits: *Please describe any additional economic, operational, environmental, or safety benefits achieved by implementing this practice/activity. Use the back of the page for additional space if needed.*



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BMP 3: Partner Reported Opportunities (PROs)

(For more details on PROs, visit www.epa.gov/gasstar/pro/index.htm)

Current Year Activities

A. Activity description: Please provide a separate PRO reporting form for each activity reported

Check one of the following:

- ☐ Install vapor recovery units (VRUs)
- ☐ Install flares
- ☐ Install electronic safety devices
- ☐ Install instrument air systems
- ☐ Eliminate unnecessary equipment and/or systems
- ☐ Other (Please specify): _____

Please describe how your company implemented this practice/activity:

B. Level of Implementation (check one):

- ☐ Number of units installed: _____ units
- ☐ Frequency of practice: _____ times/year

C. Are these emissions reductions (check one):

- ☐ Continuing/ongoing
- ☐ One-time

D. Methane emissions reduction: _____ Mcf

E. Cost summary: Estimated cost of implementing this practice/activity (including equipment and labor): \$ _____

Please identify the basis for the emissions reduction estimate, using the space provided to show any calculations

- ☐ Actual field measurement
- ☐ Calculation using manufacturer specifications/other source
- ☐ Other (Please specify)

F. Total value of gas saved: \$ _____

Total value of gas saved
= Methane emissions reduction (in Mcf)
x Gas value (in \$/Mcf) [If not known, use default of \$3.00/Mcf]

G. To what extent do you expect to implement this practice next year?

Previous Years' Activities

Use the table below to report any past implementation of this PRO, but not previously reported to Natural Gas STAR

| Year | Frequency of Practice/Activity or # of Installations | Total Cost of Practice/Activity (incl. equipment and labor) (\$) | Estimated Reductions (Mcf/yr) | Value of Gas Saved (\$) |
|------|------------------------------------------------------|------------------------------------------------------------------|-------------------------------|-------------------------|
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Additional Program Accomplishments

The Natural Gas STAR Program will use any information entered here to recognize the efforts and achievements of outstanding partners.

Please include any additional information you would like to share about your company's participation in Natural Gas STAR. Examples may include:

- Activities to strengthen your program (e.g., training/education, innovative technologies or activities, pilot projects, employee incentive programs).
- Efforts to communicate your participation and successes (e.g., internal newsletters, press releases, company Web site).
- Participation in Natural Gas STAR program activities (e.g., contributions to case studies, presentation at annual workshop).

Additional Accomplishments:

Additional Accomplishments: *Please use the back of the page for additional space if needed.*